Journal of Turbomachinery

Author Index

All authors of papers published in this volume are listed alphabetically. Full titles are included in each first author's entry. Letters in parentheses follow some of the page numbers: TB indicates Technical Brief, D indicates Discussion, and E indicates Errata.

Abhari, R. S. — (see Pfau, A.) **129**, 164–174
_____ (see Behr, T.) **129**, 348–359
Abhari, Reza S. — (see Burdet, André) **129**, 221–231
_____ (see Burdet, André) **129**, 258–268
Ainsworth, Roger W. — (see Thorpe, Steven J.) **129**, 84–91
Alsalihi, Z. — (see Verstraete, T.) **129**, 835–841
Artt, D. — (see Spence, S. W. T.) **129**, 53–61
Ashpis, D. E. — (see Suzen, Y. B.) **129**, 527–541
Ashpis, David E. — (see Schobeiri, M. T.) **129**, 92–107

Bakken, Lars E. — (see Syverud, Elisabet) **129**, 119–126
_____ (see Syverud, Elisabet) **129**, 136–142
Barigozzi, Giovanna, Franchini, Giuseppe, and Perdichizzi, Antonio — End-Wall Film Cooling Through Fan-Shaped Holes With Different Area Ratios. **129**, 212–220
Barringer, M. D., Thole, K. A., and Polanka, M. D. — Experimental Evaluation of an Inlet Profile Generator for High-Pressure Turbine Tests. **129**, 382–393
Barton, Jeffery — (see Padova, Corso) **129**, 713–723
Behr, T., Kalfas, A. I., and Abhari, R. S. — Unsteady Flow Physics and Performance of a One-and-1/2-Stage Unshrouded High Work Turbine. **129**, 348–359
Bogard, David G. — (see Waye, Scot K.) **129**, 202–211
_____ (see Waye, Scot K.) **129**, 294–302
_____ (see Jenkins, Sean C.) **129**, 619–627
Bohn, Dieter — (see Laschet, Gottfried) **129**, 791–799
_____ (see Kusterer, Karsten) **129**, 809–815
Breeze-Stringfellow, Andrew — (see Langford, Matthew D.) **129**, 127–135
Brekke, Olaf — (see Syverud, Elisabet) **129**, 119–126
Budwig, Ralph S. — (see McIlroy, Hugh M., Jr.) **129**, 318–330
Bunker, Ronald S. — (see Nasir, Hasan) **129**, 151–163
_____ Gas Turbine Heat Transfer: Ten Remaining Hot Gas Path Challenges. **129**, 193–201
Burd, S. W. — (see Scrittore, J. J.) **129**, 518–526
Burdet, André, Abhari, Reza S., and Rose, Martin G. — Modeling of Film Cooling—Part II: Model for Use in Three-Dimensional Computational Fluid Dynamics. **129**, 221–231
_____ **, and Abhari, Reza S.** — Three-Dimensional Flow Prediction and Improvement of Holes Arrangement of a Film-Cooled Turbine Blade Using a Feature-Based Jet Model. **129**, 258–268

Cakan, M., and Taslim, M. E. — Experimental and Numerical Study of Mass/Heat Transfer on an Airfoil Trailing-Edge Slots and Lands. **129**, 281–293
Canepa, Edward, Formosa, Piergiorgio, Lengani, Davide, Simoni, Daniele, Ubaldi, Marina, and Zunino, Pietro — Influence of Aerodynamic Loading on Rotor-Stator Aerodynamic Interaction in a Two-Stage Low Pressure Research Turbine. **129**, 765–772
Cardwell, N. D., Sundaram, N., and Thole, K. A. — The Effects of Varying the Combustor-Turbine Gap. **129**, 756–764
Chana, K. S. — (see Povey, T.) **129**, 32–43
Cho, Hyung Hee — (see Jeon, Yun Heung) **129**, 636–642
Clark, J. P. — (see Praisner, T. J.) **129**, 1–13
_____ (see Praisner, T. J.) **129**, 14–22
_____ **, and Grover, E. A.** — Assessing Convergence in Predictions of Periodic-Unsteady Flowfields. **129**, 740–749
Clarkson, P. John — (see Jarrett, Jerome P.) **129**, 488–494
Colban, W., Thole, K. A., and Haendler, M. — Experimental and Computational Comparisons of Fan-Shaped Film Cooling on a Turbine Vane Surface. **129**, 23–31
Corke, T. C. — (see Suzen, Y. B.) **129**, 527–541
Corral, Roque, Gallardo, Juan Manuel, and Vasco, Carlos — Aeroelastic Stability of Welded-in-Pair Low Pressure Turbine Rotor Blades: A Comparative Study Using Linear Methods. **129**, 72–83
Corriveau, D., and Sjolander, S. A. — Influence of Loading Distribution on the Off-Design Performance of High-Pressure Turbine Blades. **129**, 563–571
Cotroneo, Joseph A. — (see Song, Bo) **129**, 62–71
Coulthard, Sarah M., Volino, Ralph J., and Flack, Karen A. — Effect of Jet Pulsing on Film Cooling—Part I: Effectiveness and Flow-Field Temperature Results. **129**, 232–246
_____ **, Volino, Ralph J., and Flack, Karen A.** — Effect of Jet Pulsing on Film Cooling—Part II: Heat Transfer Results. **129**, 247–257
Crichton, Daniel, Xu, Liping, and Hall, Cesare A. — Preliminary Fan Design for a Silent Aircraft. **129**, 184–191
_____ (see Hall, Cesare A.) **129**, 479–487
Cumpsty, N. A. — (see Leishman, B. A.) **129**, 645–658
_____ (see Leishman, B. A.) **129**, 659–668
_____ (see Leishman, B. A.) **129**, 669–678
Cumpsty, Nicholas A. — (see Gbadebo, Semiu A.) **129**, 679–685
Curtis, Eric — (see Reid, Kevin) **129**, 303–310

Dang, T. Q. — (see van Rooij, M. P. C.) **129**, 108–118
Dannhauer, Axel — (see Rehder, Hans-Jürgen) **129**, 608–618
Dawes, William N. — (see Jarrett, Jerome P.) **129**, 488–494
Denton, J. D. — (see Leishman, B. A.) **129**, 645–658
_____ (see Leishman, B. A.) **129**, 659–668
Denton, John — (see Reid, Kevin) **129**, 303–310
Diller, T. E. — (see Nix, A. C.) **129**, 542–550
Dossena, V. — (see Gaetani, P.) **129**, 572–579
_____ (see Gaetani, P.) **129**, 580–590
Dunn, Michael G. — (see Padova, Corso) **129**, 713–723

Ekkad, Srinath V. — (see Nasir, Hasan) **129**, 151–163
Ertas, Bugra H. — (see Gamal, Ahmed M.) **129**, 826–834
Estevadeordal, Jordi — (see Langford, Matthew D.) **129**, 127–135
Ewins, D. J. — (see Petrov, E. P.) **129**, 143–150
_____ (see Nikolic, M.) **129**, 730–739

Flack, Karen A. — (see Coulthard, Sarah M.) **129**, 232–246
_____ (see Coulthard, Sarah M.) **129**, 247–257
Formosa, Piergiorgio — (see Canepa, Edward) **129**, 765–772
Fox, Mike — (see Park, Jongmyung) **129**, 269–280

Journal of Turbomachinery

Author Index

All authors of papers published in this volume are listed alphabetically. Full titles are included in each first author's entry. Letters in parentheses follow some of the page numbers: TB indicates Technical Brief, D indicates Discussion, and E indicates Errata.

Abhari, R. S. — (see Pfau, A.) **129**, 164–174
_____ (see Behr, T.) **129**, 348–359
Abhari, Reza S. — (see Burdet, André) **129**, 221–231
_____ (see Burdet, André) **129**, 258–268
Ainsworth, Roger W. — (see Thorpe, Steven J.) **129**, 84–91
Alsalihi, Z. — (see Verstraete, T.) **129**, 835–841
Artt, D. — (see Spence, S. W. T.) **129**, 53–61
Ashpis, D. E. — (see Suzen, Y. B.) **129**, 527–541
Ashpis, David E. — (see Schobeiri, M. T.) **129**, 92–107

Bakken, Lars E. — (see Syverud, Elisabet) **129**, 119–126
_____ (see Syverud, Elisabet) **129**, 136–142
Barigozzi, Giovanna, Franchini, Giuseppe, and Perdichizzi, Antonio — End-Wall Film Cooling Through Fan-Shaped Holes With Different Area Ratios. **129**, 212–220
Barringer, M. D., Thole, K. A., and Polanka, M. D. — Experimental Evaluation of an Inlet Profile Generator for High-Pressure Turbine Tests. **129**, 382–393
Barton, Jeffery — (see Padova, Corso) **129**, 713–723
Behr, T., Kalfas, A. I., and Abhari, R. S. — Unsteady Flow Physics and Performance of a One-and-1/2-Stage Unshrouded High Work Turbine. **129**, 348–359
Bogard, David G. — (see Waye, Scot K.) **129**, 202–211
_____ (see Waye, Scot K.) **129**, 294–302
_____ (see Jenkins, Sean C.) **129**, 619–627
Bohn, Dieter — (see Laschet, Gottfried) **129**, 791–799
_____ (see Kusterer, Karsten) **129**, 809–815
Breeze-Stringfellow, Andrew — (see Langford, Matthew D.) **129**, 127–135
Brekke, Olaf — (see Syverud, Elisabet) **129**, 119–126
Budwig, Ralph S. — (see McIlroy, Hugh M., Jr.) **129**, 318–330
Bunker, Ronald S. — (see Nasir, Hasan) **129**, 151–163
_____ Gas Turbine Heat Transfer: Ten Remaining Hot Gas Path Challenges. **129**, 193–201
Burd, S. W. — (see Scrittore, J. J.) **129**, 518–526
Burdet, André, Abhari, Reza S., and Rose, Martin G. — Modeling of Film Cooling—Part II: Model for Use in Three-Dimensional Computational Fluid Dynamics. **129**, 221–231
_____ **, and Abhari, Reza S.** — Three-Dimensional Flow Prediction and Improvement of Holes Arrangement of a Film-Cooled Turbine Blade Using a Feature-Based Jet Model. **129**, 258–268

Cakan, M., and Taslim, M. E. — Experimental and Numerical Study of Mass/Heat Transfer on an Airfoil Trailing-Edge Slots and Lands. **129**, 281–293
Canepa, Edward, Formosa, Piergiorgio, Lengani, Davide, Simoni, Daniele, Ubaldi, Marina, and Zunino, Pietro — Influence of Aerodynamic Loading on Rotor-Stator Aerodynamic Interaction in a Two-Stage Low Pressure Research Turbine. **129**, 765–772
Cardwell, N. D., Sundaram, N., and Thole, K. A. — The Effects of Varying the Combustor-Turbine Gap. **129**, 756–764
Chana, K. S. — (see Povey, T.) **129**, 32–43
Cho, Hyung Hee — (see Jeon, Yun Heung) **129**, 636–642
Clark, J. P. — (see Praisner, T. J.) **129**, 1–13
_____ (see Praisner, T. J.) **129**, 14–22
_____ **, and Grover, E. A.** — Assessing Convergence in Predictions of Periodic-Unsteady Flowfields. **129**, 740–749
Clarkson, P. John — (see Jarrett, Jerome P.) **129**, 488–494
Colban, W., Thole, K. A., and Haendler, M. — Experimental and Computational Comparisons of Fan-Shaped Film Cooling on a Turbine Vane Surface. **129**, 23–31
Corke, T. C. — (see Suzen, Y. B.) **129**, 527–541
Corral, Roque, Gallardo, Juan Manuel, and Vasco, Carlos — Aeroelastic Stability of Welded-in-Pair Low Pressure Turbine Rotor Blades: A Comparative Study Using Linear Methods. **129**, 72–83
Corriveau, D., and Sjolander, S. A. — Influence of Loading Distribution on the Off-Design Performance of High-Pressure Turbine Blades. **129**, 563–571
Cotroneo, Joseph A. — (see Song, Bo) **129**, 62–71
Coulthard, Sarah M., Volino, Ralph J., and Flack, Karen A. — Effect of Jet Pulsing on Film Cooling—Part I: Effectiveness and Flow-Field Temperature Results. **129**, 232–246
_____ **, Volino, Ralph J., and Flack, Karen A.** — Effect of Jet Pulsing on Film Cooling—Part II: Heat Transfer Results. **129**, 247–257
Crichton, Daniel, Xu, Liping, and Hall, Cesare A. — Preliminary Fan Design for a Silent Aircraft. **129**, 184–191
_____ (see Hall, Cesare A.) **129**, 479–487
Cumpsty, N. A. — (see Leishman, B. A.) **129**, 645–658
_____ (see Leishman, B. A.) **129**, 659–668
_____ (see Leishman, B. A.) **129**, 669–678
Cumpsty, Nicholas A. — (see Gbadebo, Semiu A.) **129**, 679–685
Curtis, Eric — (see Reid, Kevin) **129**, 303–310

Dang, T. Q. — (see van Rooij, M. P. C.) **129**, 108–118
Dannhauer, Axel — (see Rehder, Hans-Jürgen) **129**, 608–618
Dawes, William N. — (see Jarrett, Jerome P.) **129**, 488–494
Denton, J. D. — (see Leishman, B. A.) **129**, 645–658
_____ (see Leishman, B. A.) **129**, 659–668
Denton, John — (see Reid, Kevin) **129**, 303–310
Diller, T. E. — (see Nix, A. C.) **129**, 542–550
Dossena, V. — (see Gaetani, P.) **129**, 572–579
_____ (see Gaetani, P.) **129**, 580–590
Dunn, Michael G. — (see Padova, Corso) **129**, 713–723

Ekkad, Srinath V. — (see Nasir, Hasan) **129**, 151–163
Ertas, Bugra H. — (see Gamal, Ahmed M.) **129**, 826–834
Estevadeordal, Jordi — (see Langford, Matthew D.) **129**, 127–135
Ewins, D. J. — (see Petrov, E. P.) **129**, 143–150
_____ (see Nikolic, M.) **129**, 730–739

Flack, Karen A. — (see Coulthard, Sarah M.) **129**, 232–246
_____ (see Coulthard, Sarah M.) **129**, 247–257
Formosa, Piergiorgio — (see Canepa, Edward) **129**, 765–772
Fox, Mike — (see Park, Jongmyung) **129**, 269–280

Franchini, Giuseppe — (see Barigozzi, Giovanna) **129**, 212–220
Fuchs, A. — (see Schennach, O.) **129**, 372–381

Gaetani, P., Persico, G., Dossena, V., and Osnaghi, C. — Investigation of the Flow Field in a High-Pressure Turbine Stage for Two Stator-Rotor Axial Gaps—Part I: Three-Dimensional Time-Averaged Flow Field. **129**, 572–579
_____, **Persico, G., Dossena, V., and Osnaghi, C.** — Investigation of the Flow Field in a High-Pressure Turbine Stage for Two Stator-Rotor Axial Gaps—Part II: Unsteady Flow Field. **129**, 580–590
Gallardo, Juan Manuel — (see Corral, Roque) **129**, 72–83
Gamal, Ahmed M., Ertas, Bugra H., and Vance, John M. — High-Pressure Pocket Damper Seals: Leakage Rates and Cavity Pressures. **129**, 826–834
Gbadebo, Semiu A., Cumpsty, Nicholas A., and Hynes, Tom P. — Interaction of Tip Clearance Flow and Three-Dimensional Separations in Axial Compressors. **129**, 679–685
Genrup, M. — (see Hildebrandt, A.) **129**, 421–433
Goodro, Matt — (see Park, Jongmyung) **129**, 269–280
Göttlich, E. — (see Schennach, O.) **129**, 372–381
Gritsch, Michael — (see Maurer, Michael) **129**, 800–808
Grover, E. A. — (see Praisner, T. J.) **129**, 14–22
_____ (see Clark, J. P.) **129**, 740–749
Guillot, Stephen A. — (see Langford, Matthew D.) **129**, 127–135

Haendler, M. — (see Colban, W.) **129**, 23–31
Hall, Cesare A. — (see Crichton, Daniel) **129**, 184–191
_____, **and Crichton, Daniel** — Engine Design Studies for a Silent Aircraft. **129**, 479–487
Harvey, Neil — (see Vera, Maria) **129**, 340–347
Harvey, Neil W. — (see Thorpe, Steven J.) **129**, 84–91
_____ (see Pullan, Graham) **129**, 591–598
Hildebrandt, A., and Genrup, M. — Numerical Investigation of the Effect of Different Back Sweep Angle and Exducer Width on the Impeller Outlet Flow Pattern of a Centrifugal Compressor With Vaneless Diffuser. **129**, 421–433
Hodson, Howard — (see Vera, Maria) **129**, 340–347
Hodson, Howard P. — (see Wheeler, Andrew P. S.) **129**, 705–712
Hofer, Douglas C. — (see Song, Bo) **129**, 62–71
Huang, J. — (see Suzen, Y. B.) **129**, 527–541
Huang, P. G. — (see Suzen, Y. B.) **129**, 527–541
Hurrion, J. — (see Povey, T.) **129**, 32–43
Hynes, Tom P. — (see Gbadebo, Semiu A.) **129**, 679–685

Ibaraki, Seiichi, Matsuo, Tetsuya, and Yokoyama, Takao — Investigation of Unsteady Flow Field in a Vaned Diffuser of a Transonic Centrifugal Compressor. **129**, 686–693
Imregun, M. — (see Vahdati, M.) **129**, 412–420
Imregun, Mehmet — (see Wilson, Mark J.) **129**, 404–411

Jarrett, Jerome P., Dawes, William N., and Clarkson, P. John — An Approach to Integrated Multi-Disciplinary Turbomachinery Design. **129**, 488–494
Jenkins, Sean C., and Bogard, David G. — Scaling of Guide Vane Coolant Profiles and the Reduction of a Simulated Hot Streak. **129**, 619–627
Jeon, Yun Heung, Park, Suk Hwan, Kim, Kyung Min, Lee, Dong Hyun, and Cho, Hyung Hee — Effects of Bleed Flow on Heat/Mass Transfer in a Rotating Rib-Roughened Channel. **129**, 636–642
Johnson, Mark W. — Predicting Transition on Concave Surfaces. **129**, 750–755
Jones, T. V. — (see Povey, T.) **129**, 32–43
_____ (see Povey, T.) **129**, 175–183

Kalfas, A. I. — (see Pfau, A.) **129**, 164–174
_____ (see Behr, T.) **129**, 348–359
Kim, Kyung Min — (see Jeon, Yun Heung) **129**, 636–642
King, P. I. — (see Suzen, Y. B.) **129**, 527–541
Krewinkel, Robert — (see Laschet, Gottfried) **129**, 791–799
Kurosaki, Masahiro — (see Tahara, Nobuyuki) **129**, 448–456
Kusterer, Karsten, Bohn, Dieter, Sugimoto, Takao, and Tanaka, Ryozo — Double-Jet Ejection of Cooling Air for Improved Film Cooling. **129**, 809–815

Lake, J. P. — (see Suzen, Y. B.) **129**, 527–541
Langford, Matthew D., Breeze-Stringfellow, Andrew, Guillot, Stephen A., Solomon, William, Ng, Wing F., and Estevadeordal, Jordi — Experimental Investigation of the Effects of a Moving Shock Wave on Compressor Stator Flow. **129**, 127–135
Lardeau, Sylvain, Li, Ning, and Leschziner, Michael A. — Large Eddy Simulation of Transitional Boundary Layers at High Free-Stream Turbulence Intensity and Implications for RANS Modeling. **129**, 311–317
Larosiliere, L. M. — (see van Rooij, M. P. C.) **129**, 108–118
Laschet, Gottfried, Rex, Stephan, Bohn, Dieter, and Krewinkel, Robert — Three-Dimensional Numerical Analysis of Curved Transpiration Cooled Plates and Homogenization of Their Aerothermal Properties. **129**, 791–799
Lee, Dong Hyun — (see Jeon, Yun Heung) **129**, 636–642
Leishman, B. A., Cumpsty, N. A., and Denton, J. D. — Effects of Bleed Rate and Endwall Location on the Aerodynamic Behavior of a Circular Hole Bleed Off-Take. **129**, 645–658
_____, **Cumpsty, N. A., and Denton, J. D.** — Effects of Inlet Ramp Surfaces on the Aerodynamic Behavior of Bleed Hole and Bleed Slot Off-Take Configurations. **129**, 659–668
_____, **and Cumpsty, N. A.** — Mechanism of the Interaction of a Ramped Bleed Slot With the Primary Flow. **129**, 669–678
Lengani, Davide — (see Canepa, Edward) **129**, 765–772
Leschziner, Michael A. — (see Lardeau, Sylvain) **129**, 311–317
Li, Ning — (see Lardeau, Sylvain) **129**, 311–317
Ligrani, Phil — (see Park, Jongmyung) **129**, 269–280
Longley, John — (see Reid, Kevin) **129**, 303–310
Luo, Jiang, and Razinsky, Eli H. — Conjugate Heat Transfer Analysis of a Cooled Turbine Vane Using the V2F Turbulence Model. **129**, 773–781

Mailach, Ronald, and Vogeler, Konrad — Unsteady Aerodynamic Blade Excitation at the Stability Limit and During Rotating Stall in an Axial Compressor. **129**, 503–511
Manwaring, Steve — (see Padova, Corso) **129**, 713–723
Marn, A. — (see Schennach, O.) **129**, 372–381
Martinez-Botas, Ricardo F. — (see Pesiridis, Apostolos) **129**, 44–52
Matsunuma, Takayuki — Unsteady Flow Field of an Axial-Flow Turbine Rotor at a Low Reynolds Number. **129**, 360–371
Matsuo, Tetsuya — (see Ibaraki, Seiichi) **129**, 686–693
Maurer, Michael, von Wolfersdorf, Jens, and Gritsch, Michael — An Experimental and Numerical Study of Heat Transfer and Pressure Loss in a Rectangular Channel With V-Shaped Ribs. **129**, 800–808
McCullough, G. — (see Spence, S. W. T.) **129**, 53–61
McEligot, Donald M. — (see Nolan, Kevin P.) **129**, 512–517
McIlroy, Hugh M., Jr., and Budwig, Ralph S. — The Boundary Layer Over Turbine Blade Models With Realistic Rough Surfaces. **129**, 318–330
Miller, Robert J. — (see Thorpe, Steven J.) **129**, 84–91
_____ (see Wheeler, Andrew P. S.) **129**, 705–712
Moll, Randall — (see Rashid, Stephen) **129**, 551–562
Moon, Hee-Koo — (see Park, Jongmyung) **129**, 269–280
Morini, M., Pinelli, M., and Venturini, M. — Development of a One-Dimensional Modular Dynamic Model for the Simulation of Surge in Compression Systems. **129**, 437–447

Moxon, A. J. W. — (see Payne, S. J.) **129**, 842–851

Nakajima, Takurou — (see Tahara, Nobuyuki) **129**, 448–456
Nakakita, Tomofumi — (see Tahara, Nobuyuki) **129**, 448–456
Nasir, Hasan, Ekkad, Srinath V., and Bunker, Ronald S. — Effect of Tip and Pressure Side Coolant Injection on Heat Transfer Distributions for a Plane and Recessed Tip. **129**, 151–163
Ng, W. F. — (see Nix, A. C.) **129**, 542–550
Ng, Wing F. — (see Song, Bo) **129**, 62–71
____ (see Langford, Matthew D.) **129**, 127–135
Nikolic, M., Petrov, E. P., and Ewins, D. J. — Coriolis Forces in Forced Response Analysis of Mistuned Bladed Disks. **129**, 730–739
Nishiura, Masakazu — (see Okita, Yoji) **129**, 331–339
Nix, A. C., Diller, T. E., and Ng, W. F. — Experimental Measurements and Modeling of the Effects of Large-Scale Freestream Turbulence on Heat Transfer. **129**, 542–550
Nolan, Kevin P., Walsh, Edmond J., McEligot, Donald M., and Volino, Ralph J. — Predicting Entropy Generation Rates in Transitional Boundary Layers Based on Intermittency. **129**, 512–517

Ohta, Yutaka — (see Tahara, Nobuyuki) **129**, 448–456
Okita, Yoji, and Nishiura, Masakazu — Film Effectiveness Performance of an Arrowhead-Shaped Film-Cooling Hole Geometry. **129**, 331–339
Oldfield, M. L. G. — (see Povey, T.) **129**, 175–183
Osnaghi, C. — (see Gaetani, P.) **129**, 572–579
____ (see Gaetani, P.) **129**, 580–590
Outa, Eisuke — (see Tahara, Nobuyuki) **129**, 448–456
Öztürk, B. — (see Schobeiri, M. T.) **129**, 92–107

Padova, Corso, Barton, Jeffery, Dunn, Michael G., and Manwaring, Steve — Experimental Results From Controlled Blade Tip/Shroud Rubs at Engine Speed. **129**, 713–723
Park, Jongmyung, Goodro, Matt, Ligrani, Phil, Fox, Mike, and Moon, Hee-Koo — Separate Effects of Mach Number and Reynolds Number on Jet Array Impingement Heat Transfer. **129**, 269–280
Park, Suk Hwan — (see Jeon, Yun Heung) **129**, 636–642
Payne, S. J., and Moxon, A. J. W. — High-Frequency Effects in the Aspirating Probe. **129**, 842–851
Pecnik, R. — (see Schennach, O.) **129**, 372–381
Pecnik, Rene, and Sanz, Wolfgang — Application of the Turbulent Potential Model to Heat Transfer Predictions on a Turbine Guide Vane. **129**, 628–635
Perdichizzi, Antonio — (see Barigozzi, Giovanna) **129**, 212–220
Persico, G. — (see Gaetani, P.) **129**, 572–579
____ (see Gaetani, P.) **129**, 580–590
Pesiridis, Apostolos, and Martinez-Botas, Ricardo F. — Experimental Evaluation of Active Flow Control Mixed-Flow Turbine for Automotive Turbocharger Application. **129**, 44–52
Petrov, E. P., and Ewins, D. J. — Advanced Modeling of Underplatform Friction Dampers for Analysis of Bladed Disk Vibration. **129**, 143–150
____ Direct Parametric Analysis of Resonance Regimes for Nonlinear Vibrations of Bladed Disks. **129**, 495–502
____ (see Nikolic, M.) **129**, 730–739
Pfau, A., Kalfas, A. I., and Abhari, R. S. — Making Use of Labyrinth Interaction Flow. **129**, 164–174
Piggush, J. D., and Simon, T. W. — Heat Transfer Measurements in a First-Stage Nozzle Cascade Having Endwall Contouring: Misalignment and Leakage Studies. **129**, 782–790
Pinelli, M. — (see Morini, M.) **129**, 437–447
Polanka, M. D. — (see Barringer, M. D.) **129**, 382–393
Povey, T., Chana, K. S., Jones, T. V., and Hurrion, J. — The Effect of Hot-Streaks on HP Vane Surface and Endwall Heat Transfer: An Experimental and Numerical Study. **129**, 32–43
____, **Jones, T. V., and Oldfield, M. L. G.** — On a Novel Annular Sector Cascade Technique. **129**, 175–183
Praisner, T. J., and Clark, J. P. — Predicting Transition in Turbomachinery—Part I: A Review and New Model Development. **129**, 1–13
____, **Grover, E. A., Rice, M. J., and Clark, J. P.** — Predicting Transition in Turbomachinery—Part II: Model Validation and Benchmarking. **129**, 14–22
Pullan, Graham — (see Reid, Kevin) **129**, 303–310
____, **and Harvey, Neil W.** — Influence of Sweep on Axial Flow Turbine Aerodynamics at Midspan. **129**, 591–598

Rashid, Stephen, Tremmel, Matthew, Waggott, John, and Moll, Randall — Curtis Stage Nozzle/Rotor Aerodynamic Interaction and the Effect on Stage Performance. **129**, 551–562
Razinsky, Eli H. — (see Luo, Jiang) **129**, 773–781
Rehder, Hans-Jürgen, and Dannhauer, Axel — Experimental Investigation of Turbine Leakage Flows on the Three-Dimensional Flow Field and Endwall Heat Transfer. **129**, 608–618
Reid, Kevin, Denton, John, Pullan, Graham, Curtis, Eric, and Longley, John — The Interaction of Turbine Inter-Platform Leakage Flow With the Mainstream Flow. **129**, 303–310
Rex, Stephan — (see Laschet, Gottfried) **129**, 791–799
Rice, M. J. — (see Praisner, T. J.) **129**, 14–22
Rosborough, R. S. E. — (see Spence, S. W. T.) **129**, 53–61
Rose, Martin G. — (see Burdet, André) **129**, 221–231

Sanz, Wolfgang — (see Pecnik, Rene) **129**, 628–635
Sayma, A. I. — (see Vahdati, M.) **129**, 412–420
Sayma, Abdulnaser I. — (see Wilson, Mark J.) **129**, 404–411
Schennach, O., Woisetschläger, J., Fuchs, A., Göttlich, E., Marn, A., and Pecnik, R. — Experimental Investigations of Clocking in a One-and-a-Half-Stage Transonic Turbine Using Laser Doppler Velocimetry and a Fast Response Aerodynamic Pressure Probe. **129**, 372–381
Schobeiri, M. T., Öztürk, B., and Ashpis, David E. — Effect of Reynolds Number and Periodic Unsteady Wake Flow Condition on Boundary Layer Development, Separation, and Intermittency Behavior Along the Suction Surface of a Low Pressure Turbine Blade. **129**, 92–107
Schreiber, Heinz-Adolf — (see Sonoda, Toyotaka) **129**, 694–704
Scrittore, J. J., Thole, K. A., and Burd, S. W. — Investigation of Velocity Profiles for Effusion Cooling of a Combustor Liner. **129**, 518–526
Shah, Anant, and Tafti, Danesh K. — Transport of Particulates in an Internal Cooling Ribbed Duct. **129**, 816–825
Shah, P. N., and Tan, C. S. — Effect of Blade Passage Surface Heat Extraction on Axial Compressor Performance. **129**, 457–467
Siden, Gunnar — (see Song, Bo) **129**, 62–71
Simon, T. W. — (see Piggush, J. D.) **129**, 782–790
Simoni, Daniele — (see Canepa, Edward) **129**, 765–772
Simpson, G. — (see Vahdati, M.) **129**, 412–420
Sjolander, S. A. — (see Corriveau, D.) **129**, 563–571
Solomon, William — (see Langford, Matthew D.) **129**, 127–135
Song, Bo, Ng, Wing F., Cotroneo, Joseph A., Hofer, Douglas C., and Siden, Gunnar — Aerodynamic Design and Testing of Three Low Solidity Steam Turbine Nozzle Cascades. **129**, 62–71
Sonoda, Toyotaka, and Schreiber, Heinz-Adolf — Aerodynamic Characteristics of Supercritical Outlet Guide Vanes at Low Reynolds Number Conditions. **129**, 694–704
Spence, S. W. T., Rosborough, R. S. E., Artt, D., and McCullough, G. — A Direct Performance Comparison of Vaned and Vaneless Stators for Radial Turbines. **129**, 53–61
Storace, Albert F. — A Simplified Method for Predicting the Stability

of Aerodynamically Excited Turbomachinery. **129**, 724–729
Sugimoto, Takao — (see Kusterer, Karsten) **129**, 809–815
Sundaram, N., and Thole, K. A. — Effects of Surface Deposition, Hole Blockage, and Thermal Barrier Coating Spallation on Vane Endwall Film Cooling. **129**, 599–607
_____ (see Cardwell, N. D.) **129**, 756–764
Suzen, Y. B., Huang, P. G., Ashpis, D. E., Volino, R. J., Corke, T. C., Thomas, F. O., Huang, J., Lake, J. P., and King, P. I. — A Computational Fluid Dynamics Study of Transitional Flows in Low-Pressure Turbines Under a Wide Range of Operating Conditions. **129**, 527–541
Syverud, Elisabet, Brekke, Olaf, and Bakken, Lars E. — Axial Compressor Deterioration Caused by Saltwater Ingestion. **129**, 119–126
_____, **and Bakken, Lars E.** — Online Water Wash Tests of GE J85-13. **129**, 136–142

Tafti, Danesh K. — (see Shah, Anant) **129**, 816–825
Tahara, Nobuyuki, Kurosaki, Masahiro, Ohta, Yutaka, Outa, Eisuke, Nakajima, Takurou, and Nakakita, Tomofumi — Early Stall Warning Technique for Axial-Flow Compressors. **129**, 448–456
Tan, C. S. — (see Shah, P. N.) **129**, 457–467
Tanaka, Ryozo — (see Kusterer, Karsten) **129**, 809–815
Taslim, M. E. — (see Cakan, M.) **129**, 281–293
Thole, K. A. — (see Colban, W.) **129**, 23–31
_____ (see Barringer, M. D.) **129**, 382–393
_____ (see Scrittore, J. J.) **129**, 518–526
_____ (see Sundaram, N.) **129**, 599–607
_____ (see Cardwell, N. D.) **129**, 756–764
Thomas, F. O. — (see Suzen, Y. B.) **129**, 527–541
Thorpe, Steven J., Miller, Robert J., Yoshino, Shin, Ainsworth, Roger W., and Harvey, Neil W. — The Effect of Work Processes on the Casing Heat Transfer of a Transonic Turbine. **129**, 84–91
Tremmel, Matthew — (see Rashid, Stephen) **129**, 551–562

Ubaldi, Marina — (see Canepa, Edward) **129**, 765–772

Vahdati, M., Sayma, A. I., Imregun, M., and Simpson, G. — Multibladerow Forced Response Modeling in Axial-Flow Core Compressors. **129**, 412–420
Vance, John M. — (see Gamal, Ahmed M.) **129**, 826–834
Van den Braembussche, R. A. — (see Verstraete, T.) **129**, 835–841
van Rooij, M. P. C., Dang, T. Q., and Larosiliere, L. M. — Improving Aerodynamic Matching of Axial Compressor Blading Using a Three-Dimensional Multistage Inverse Design Method. **129**, 108–118
Vasco, Carlos — (see Corral, Roque) **129**, 72–83
Venturini, M. — (see Morini, M.) **129**, 437–447
_____ Optimization of a Real-Time Simulator Based on Recurrent Neural Networks for Compressor Transient Behavior Prediction. **129**, 468–478
Vera, Maria, Zhang, Xue Feng, Hodson, Howard, and Harvey, Neil — Separation and Transition Control on an Aft-Loaded Ultra-High-Lift LP Turbine Blade at Low Reynolds Numbers: High-Speed Validation. **129**, 340–347
Verstraete, T., Alsalihi, Z., and Van den Braembussche, R. A. — Numerical Study of the Heat Transfer in Micro Gas Turbines. **129**, 835–841
Vogeler, Konrad — (see Mailach, Ronald) **129**, 503–511
Volino, R. J. — (see Suzen, Y. B.) **129**, 527–541
Volino, Ralph J. — (see Coulthard, Sarah M.) **129**, 232–246
_____ (see Coulthard, Sarah M.) **129**, 247–257
_____ (see Nolan, Kevin P.) **129**, 512–517
von Wolfersdorf, Jens — (see Maurer, Michael) **129**, 800–808

Waggott, John — (see Rashid, Stephen) **129**, 551–562
Walsh, Edmond J. — (see Nolan, Kevin P.) **129**, 512–517
Waye, Scot K., and Bogard, David G. — High-Resolution Film Cooling Effectiveness Comparison of Axial and Compound Angle Holes on the Suction Side of a Turbine Vane. **129**, 202–211
_____, **and Bogard, David G.** — High-Resolution Film Cooling Effectiveness Measurements of Axial Holes Embedded in a Transverse Trench With Various Trench Configurations. **129**, 294–302
Wheeler, Andrew P. S., Miller, Robert J., and Hodson, Howard P. — The Effect of Wake Induced Structures on Compressor Boundary-Layers. **129**, 705–712
Williams, John, and Young, John B. — Movement of Deposited Water on Turbomachinery Rotor Blade Surfaces. **129**, 394–403
Wilson, Mark J., Imregun, Mehmet, and Sayma, Abdulnaser I. — The Effect of Stagger Variability in Gas Turbine Fan Assemblies. **129**, 404–411
Woisetschläger, J. — (see Schennach, O.) **129**, 372–381

Xu, Liping — (see Crichton, Daniel) **129**, 184–191

Yokoyama, Takao — (see Ibaraki, Seiichi) **129**, 686–693
Yoshino, Shin — (see Thorpe, Steven J.) **129**, 84–91
Young, John B. — (see Williams, John) **129**, 394–403

Zhang, Xue Feng — (see Vera, Maria) **129**, 340–347
Zunino, Pietro — (see Canepa, Edward) **129**, 765–772